

circular polarizing means, including a single linear polarizer plate, for selectively passing either right handed or left handed circularly polarized light out of natural light,

the reflective liquid crystal display device wherein

the first substrate, the liquid crystal layer, and the circular polarizing means are stacked in this order to form at least a part of the reflective liquid crystal display device,

the circular polarizing means is disposed so that a major surface of the circular polarizing means is on a liquid crystal layer side, the circularly polarized light exiting the circular polarizing means through the major surface when natural light enters the circular polarizing means,

the circular polarizing means selectively passes either right handed or left handed substantially circularly polarized light in the whole visible wavelength range from natural light,

to perform the white display, a flat surface of the first substrate linearly polarizes reflected light in arbitrary directions in a visible wavelength range,

the liquid crystal in the liquid crystal layer has a birefringence difference, which, if multiplied by a thickness of the liquid crystal layer, produces a product of not less than 150nm and not more than 350nm, and

the liquid crystal layer has a twist angle in a range of 45° to 100°.

2. (Amended) The reflective liquid crystal display device as set forth in claim 1, wherein

the circular polarizing means includes: a first optical retardation compensator plate having a retardation in a substrate normal direction set to not less than 100nm and not more than 180nm; a second optical retardation compensator plate having a retardation in a substrate normal direction set to not less than 200nm and not more than 360nm; and a linear polarizer plate, the first optical retardation compensator plate, the second optical retardation compensator plate, and the linear polarizer plate being stacked in this order when viewed from the liquid crystal layer, and

C
B
out

$|2x\theta_2 - \theta_1|$ has a value not less than 35° and not more than 55° , where θ_1 represents an angle formed by a slow axis of the first optical retardation compensator plate and either a transmission axis or an absorption axis of the linear polarizer plate, and θ_2 represents an angle formed by a slow axis of the second optical retardation compensator plate and either the transmission axis or the absorption axis of the linear polarizer plate.

3. (Amended) The reflective liquid crystal display device as set forth in claim 2, wherein the twist angle of the liquid crystal layer is in a range from 60° to 100° ,

the product of the birefringence difference of the liquid crystal in the liquid crystal layer and the thickness of the liquid crystal layer is not less than 250nm and not more than 330nm, and

either the transmission axis or the absorption axis of the linear polarizer plate forms an angle, θ_3 , of not less than 20° and not more than 70° , or not

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C 3

less than 110° and not more than 150° with an alignment direction of the liquid crystal molecules in a close proximity of the second substrate.

S 1
C 1

6. (Amended) The reflective liquid crystal display device as set forth in any one of claims 1 through 3, wherein

a single third optical retardation compensator plate or a plurality of the same is(are) provided between the circular polarizing means and the liquid crystal layer to cancel a residual phase difference of the liquid crystal layer.

B 2

7. (Amended) The reflective liquid crystal display device as set forth in claim 6, wherein

either the third optical retardation compensator plate or at least one of the third optical retardation compensator plates has an inclined optical axis, or a three-dimensionally aligned optical axis having therein a continuously varying inclined direction.
